Plants-Insects-Critters

Coral snake

Poison Plants

Poison Ivy, Poison Oak, Poison Sumack

- Varying from low bushes to moderately-sized trees, it can also be a climbing vine. The ornamental foliage assume beautiful tints in autumn, some of the varieties also bearing showy fruits. It grows in thickets and low grounds in North America, where it is quite common.

- The root is reddish and branching; the leaves rather large, three-parted. The central leaflet has a longer stalk, the lateral ones are almost stalkless. The leaflets are entire when young, but when full-grown they are variously indented, downy beneath, thin and about 4 inches long.

Summer Poison Plants

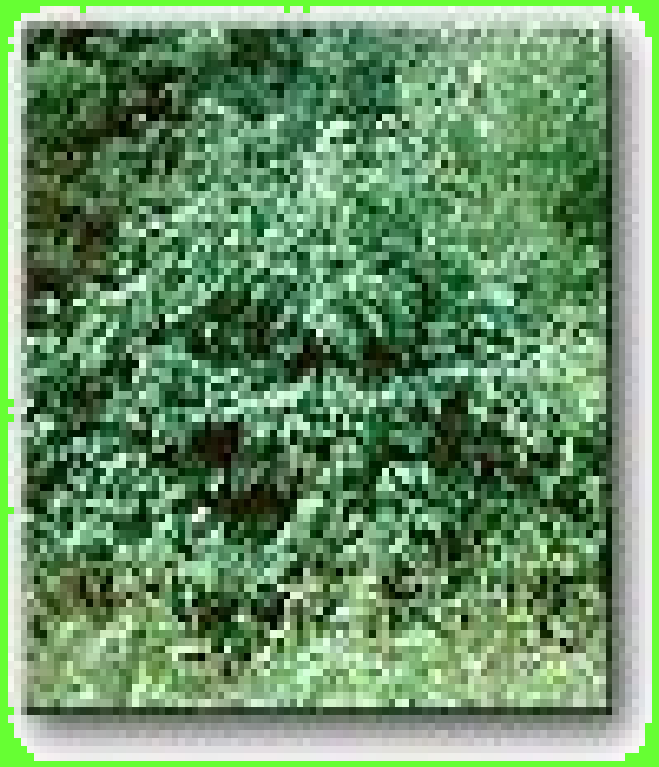
- When dry, the leaves are papery and brittle, sometimes with black spots of exuded juice turned black on drying. The flowers are in loose, slender clusters or panicles, in the axils of the leaves and are small, some perfect, others unisexual, and are greenish or yellowish-white in colour. They blossom in June, and are followed by clusters of small, globular, duncoloured, berry-like fruit.

If Exposed to Poison Plants

- You get the rash from touching the plant, or touching something that has touched it, like your clothes or your dog.
- The oil in the plant, called urushiol causes the rash.
- What if you know you've been exposed to it?

If Exposed

- **Within a hour or so you should rinse with lots of cold water - like a garden hose. Hot water will open your pores and let the oil in. Taking shower could be a disaster!**
- **Follow the cold water rinse with a cleansing of exposed skin with generous amounts of isopropyl (rubbing) alcohol, or commercial products specifically for the plant. For up to about 6 hours washing with alcohol may still help remove the oil.**
- **Alcohol removes your skin's protection along with the urushiol and any new contact will cause the urushiol to penetrate twice as fast.**

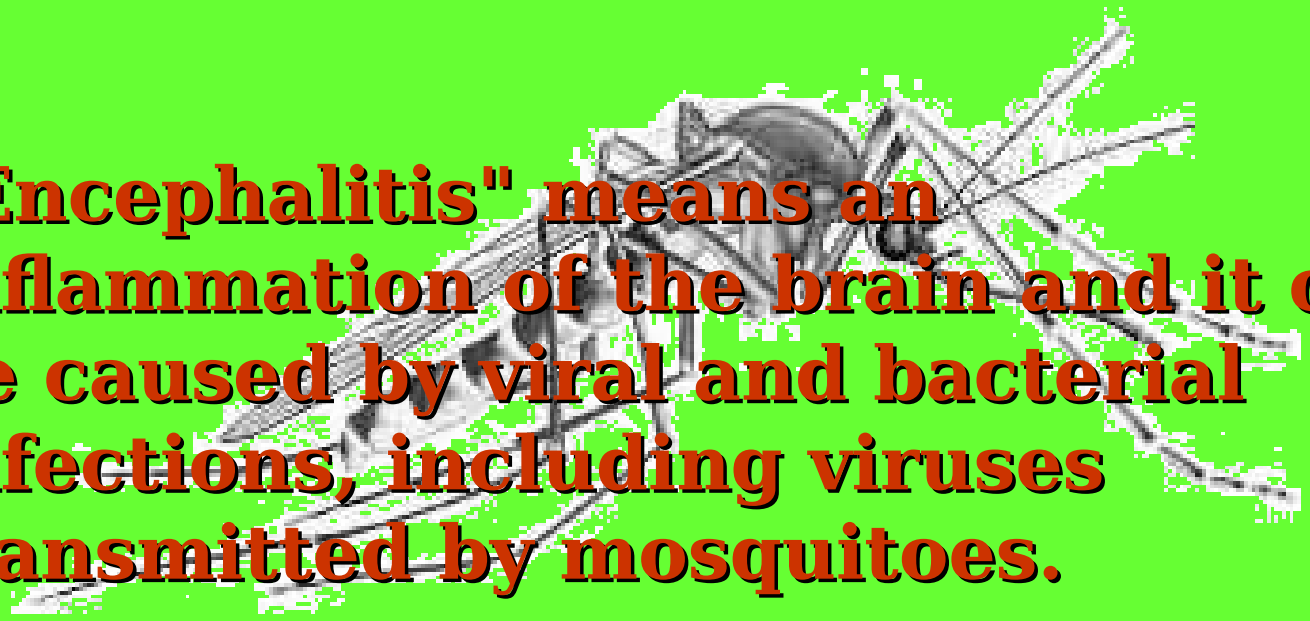


Poison Plants

Leaves of three,

LET IT BE!

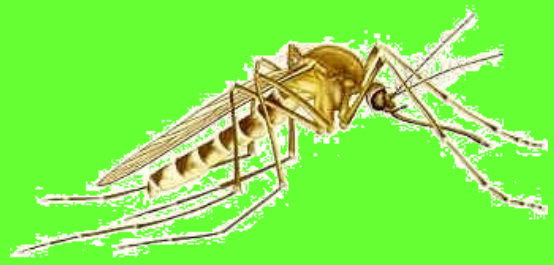
West Nile Encephalitis

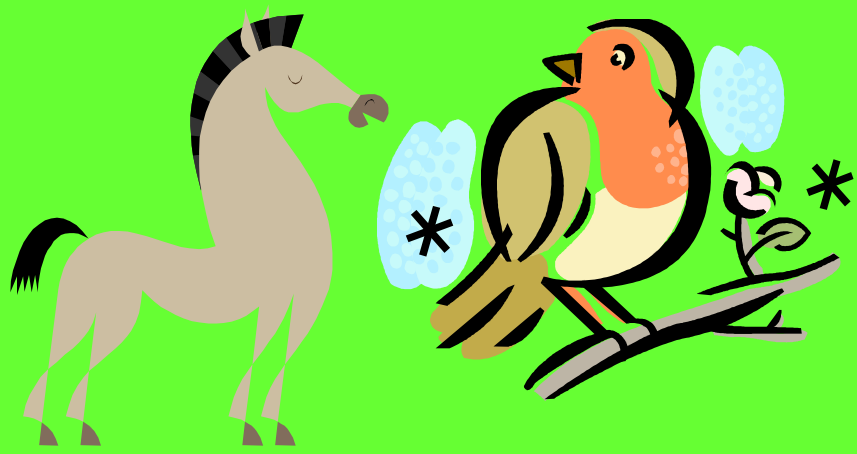


"Encephalitis" means an inflammation of the brain and it can be caused by viral and bacterial infections, including viruses transmitted by mosquitoes.

Does West Nile encephalitis occur in the United States?

Yes. The unusual death of some birds prompted investigations that revealed the outbreak actually to be West Nile encephalitis. The death of several people have been blamed on the virus. Human cases of West Nile encephalitis have so far been confined to certain geographic areas. As of October 1999, West Nile virus has been isolated from birds in Connecticut, Maryland, New Jersey; and New York; from mosquitoes in Connecticut, New Jersey, and



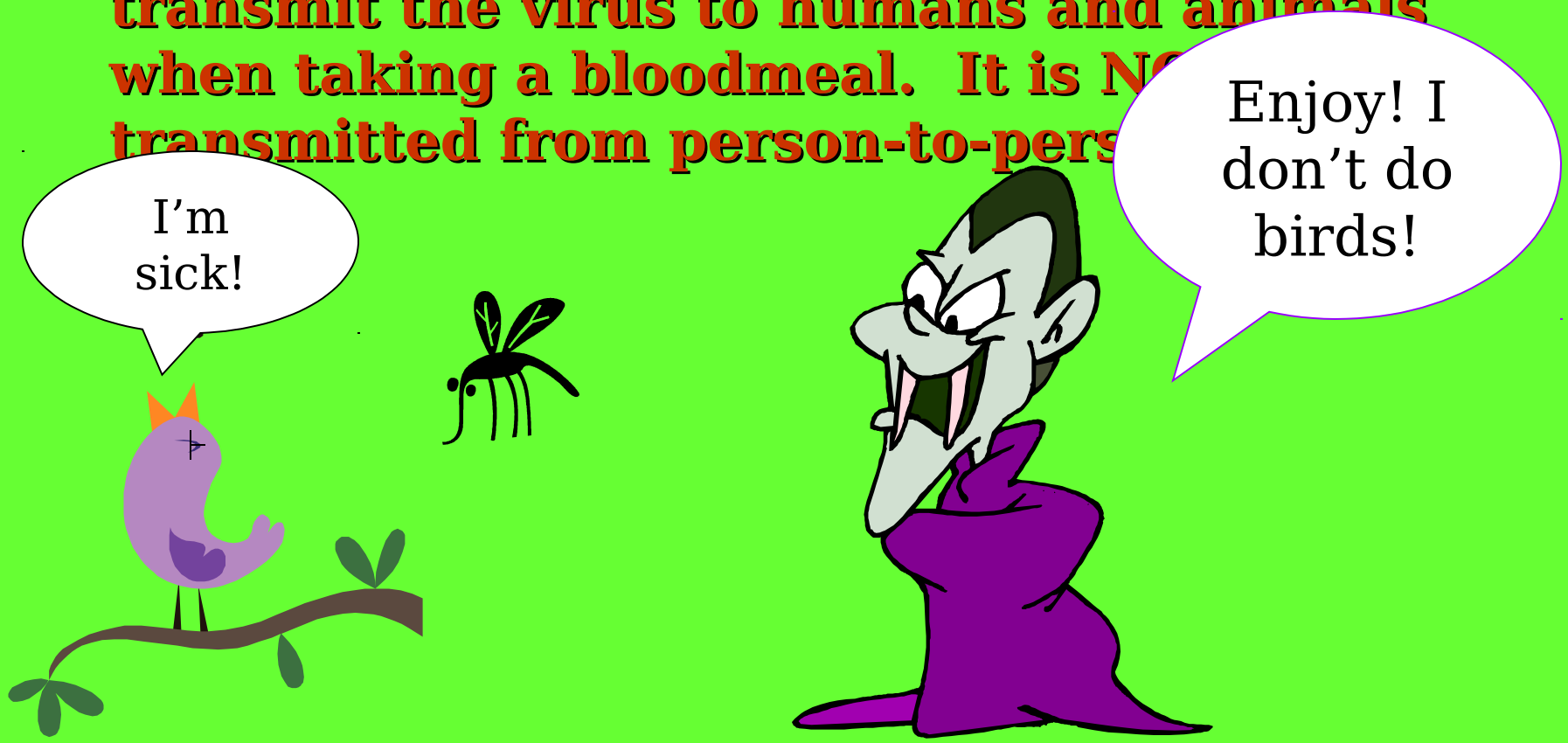


How do people get West Nile encephalitis?

By the bite of a mosquito (primarily *Culex* species) that is infected with West Nile virus.

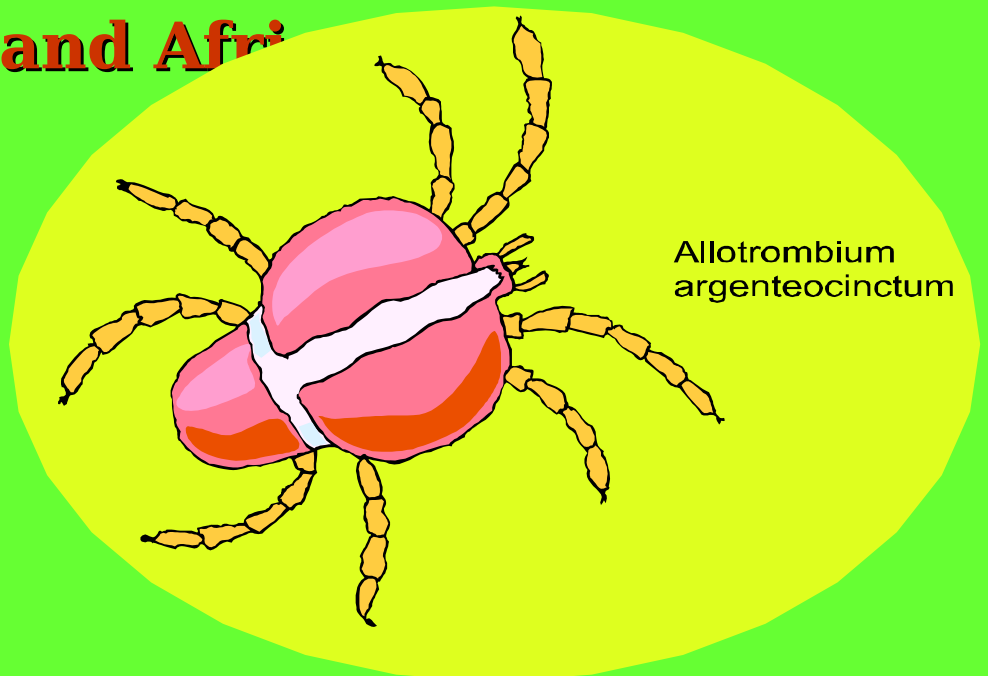
How is the virus transmitted?

Mosquitoes become infected by feeding on birds that carry West Nile virus in their blood. Infected mosquitoes then transmit the virus to humans and animals when taking a bloodmeal. It is NO transmitted from person-to-pers



Besides mosquitoes, can you get West Nile virus directly from other insects or ticks?

Infected mosquitoes are the primary vector for West Nile virus but ticks have been found infected with West Nile virus in Asia and Afri



Symptoms

Most people who are infected have no symptoms, or may experience mild illness including fever headache, and body aches, before fully recovering. Symptoms generally occur 5 to 15 days following the bite of an infected mosquito, and range from a slight fever, headache, rash, swollen glands, and conjunctivitis, to the rapid onset of severe headache, high fever, stiff

Reduce my risk of infection

Stay indoors at dawn, dusk, and early evening. This is when the primary mosquito vector is most active.

1. Wear long-sleeved shirt, long pants, and socks; wear loose-fitting clothing to prevent mosquito bites through thin fabric.

2. Use insect repellents that have been approved by the Environmental Protection Agency (EPA). They are safe and effective.

· For your skin, use a product that contains 20-50% DEET (N,N-diethyl-meta-toluamide). DEET in higher concentrations is no more effective.

· Apply DEET lightly and evenly to exposed skin; do not use underneath clothing.

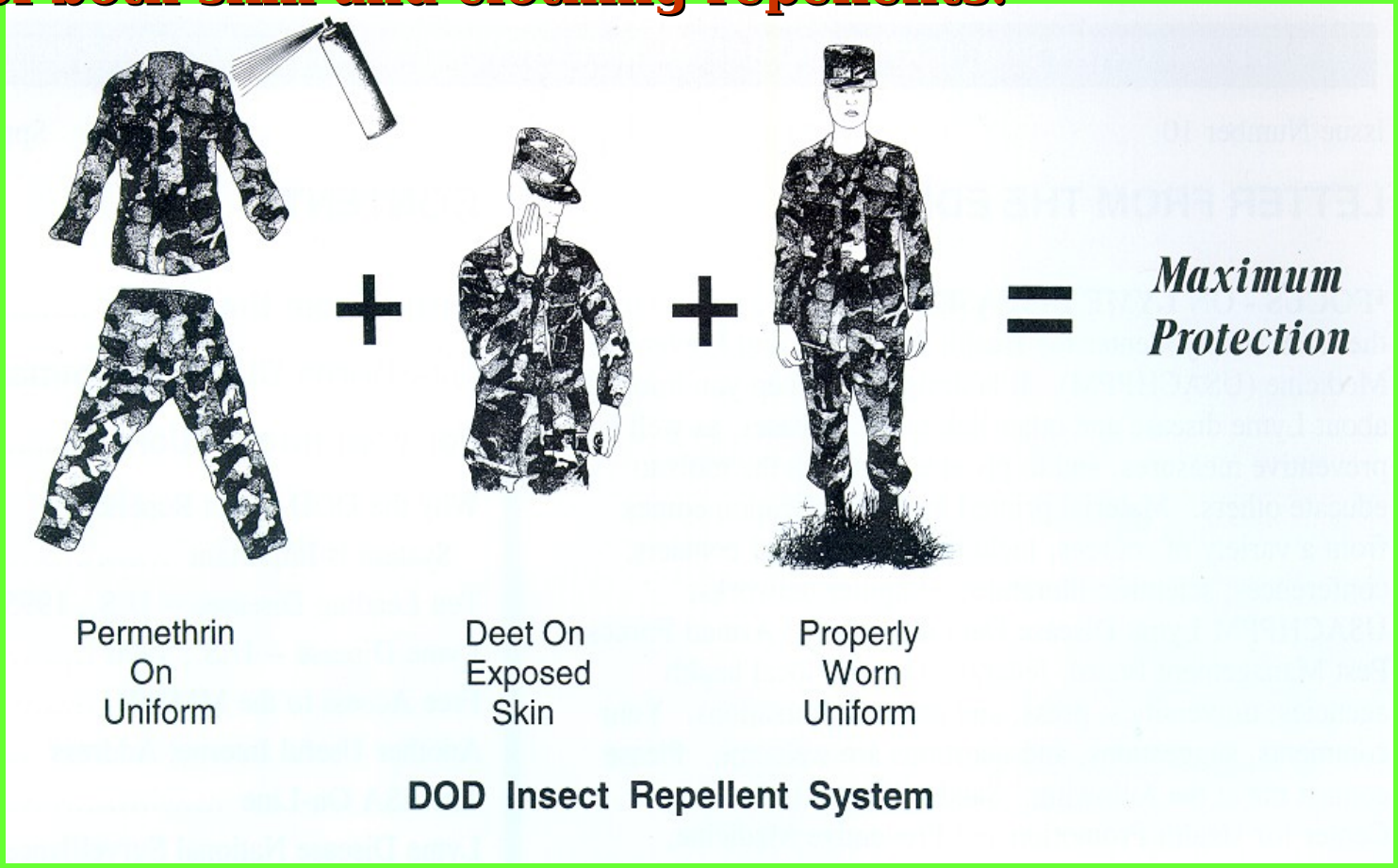
Avoid contact with eyes, lips, and broken or irritated skin.

· To apply to your face, first dispense a small amount of DEET onto your hands and then carefully spread a thin layer.

· Wash DEET off when your exposure to mosquitoes ceases.

· For your clothing, use an insect repellent spray to help

For optimum protection, soldiers should utilize the DOD INSECT REPELLENT SYSTEM. In addition to proper wear of the battle dress uniform (BDUs), which provides a physical barrier to insects, this system includes the concurrent use of both skin and clothing repellents:

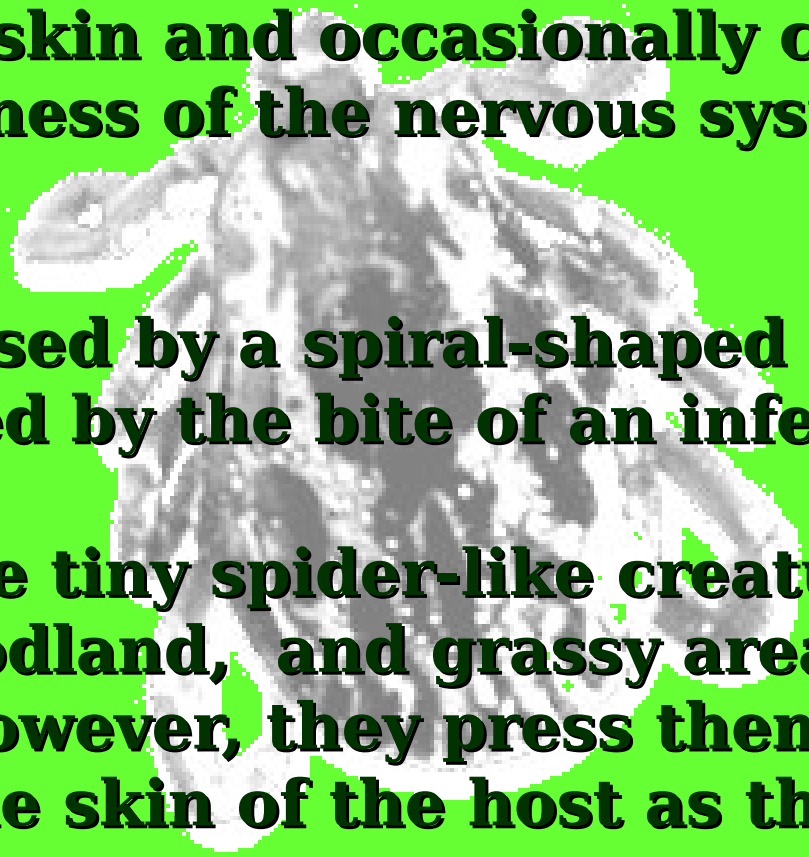


Ticks & Lyme Disease

INFORMATION
Learn about the disease
PREVENTION
Wear proper clothing
DIAGNOSIS
Be aware of symptoms
TREATMENT
Seek medical advice promptly

You may be at risk from Lyme Disease when you visit the countryside. It is caused by a bacterium carried by ticks. People who walk in the countryside, especially those walking through grass, rough vegetation or wild areas such as wooded areas, are more at risk. This presentation describes some simple precautions which you should take when you visit the

What is Lyme Disease?



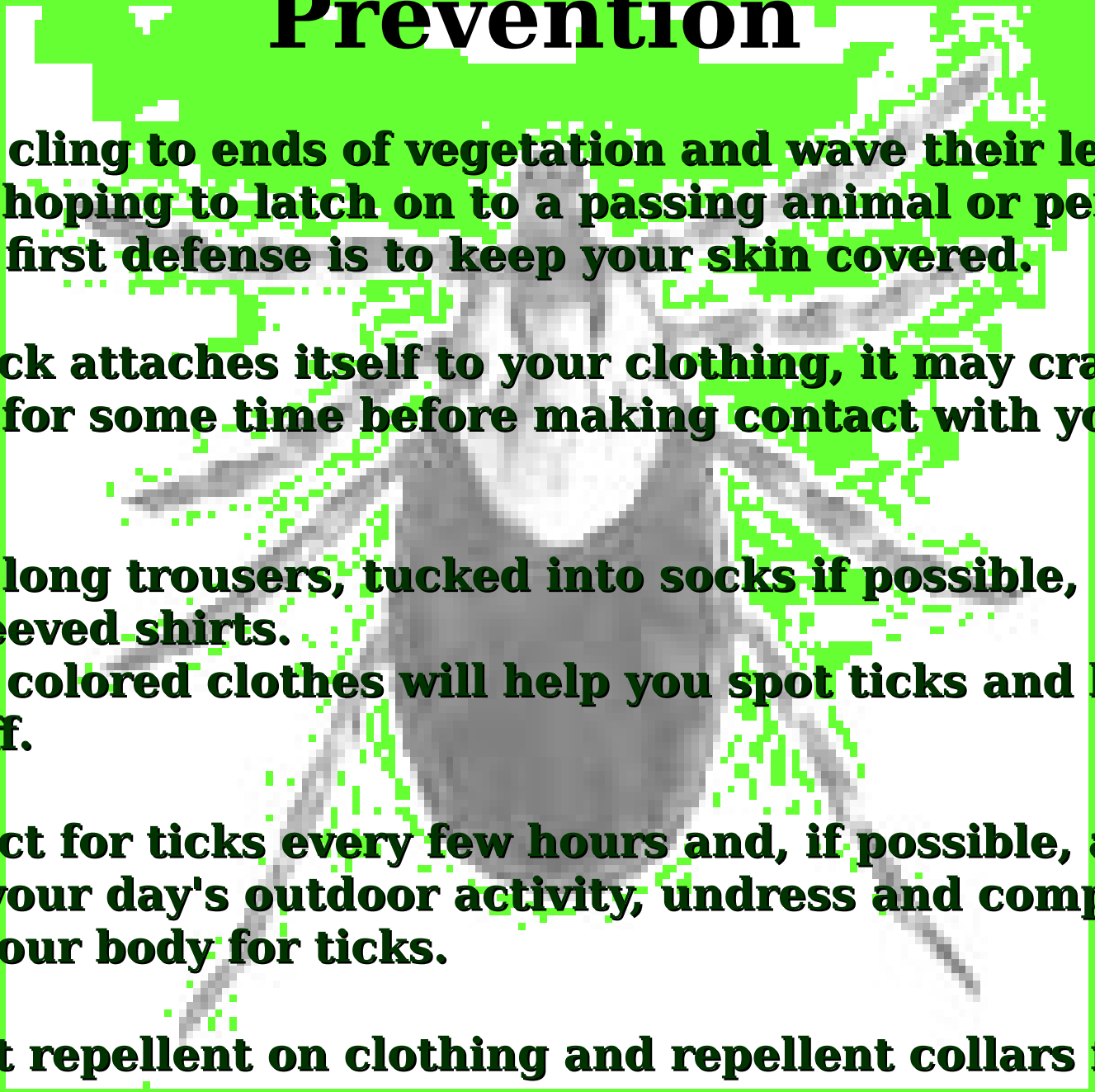
- **Lyme Disease is an infection which can affect the skin and occasionally cause serious illness of the nervous system, joints or heart.**

- **It is caused by a spiral-shaped bacterium, transmitted by the bite of an infected tick.**

- **Ticks are tiny spider-like creatures which live in woodland, and grassy areas. Unlike spiders, however, they press themselves close to the skin of the host as they crawl.**

- **The highest risk was thought to be from April to October when the tick was most**

Prevention



- Ticks cling to ends of vegetation and wave their legs around hoping to latch on to a passing animal or person - so your first defense is to keep your skin covered.

- If a tick attaches itself to your clothing, it may crawl around for some time before making contact with your skin.

- Wear long trousers, tucked into socks if possible, and long-sleeved shirts.
- Light colored clothes will help you spot ticks and brush them off.

- Inspect for ticks every few hours and, if possible, at the end of your day's outdoor activity, undress and completely check your body for ticks.

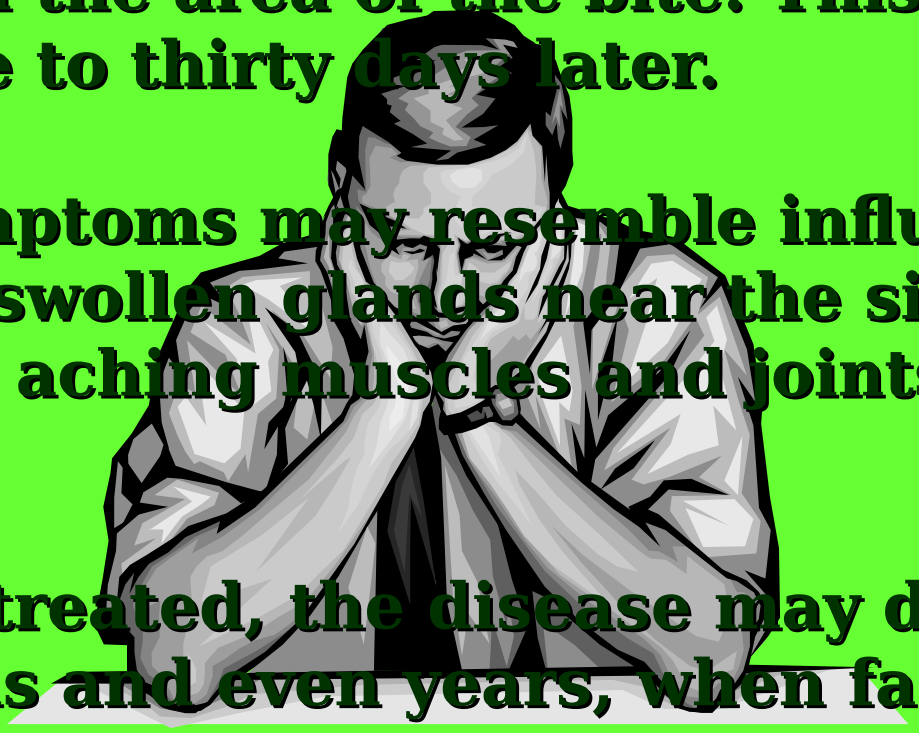
- Insect repellent on clothing and repellent collars for pets can help.

If You Are Bitten

Remove the tick as soon as possible by grasping it close to the skin with tweezers. Apply gentle pressure, twisting anti-clockwise upwards, repeating if necessary. Part of the tick may remain embedded, but you will have prevented the tick transferring the infection to you. Importan he tick in a sealed container in c velop symptoms later.

Symptoms

- **The disease may first show itself as an expanding reddish, round rash (erythema migrans) in the area of the bite. This rash starts three to thirty days later.**

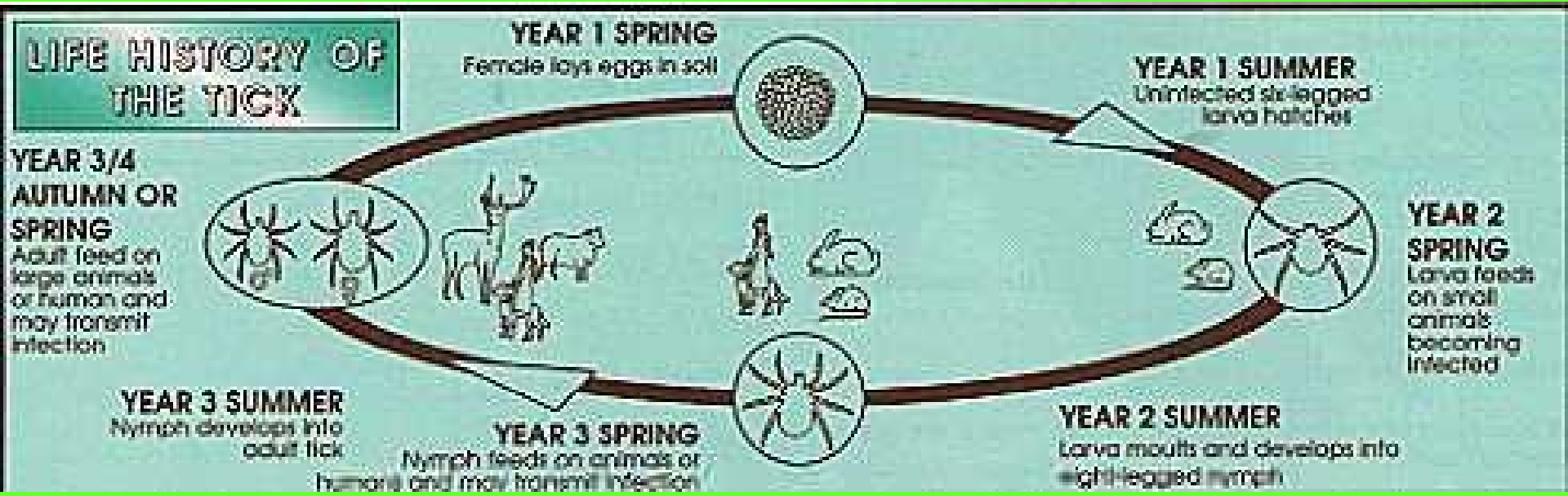


- **Early symptoms may resemble influenza ('flu,) with swollen glands near the site, mild headaches, aching muscles and joints, and tiredness.**

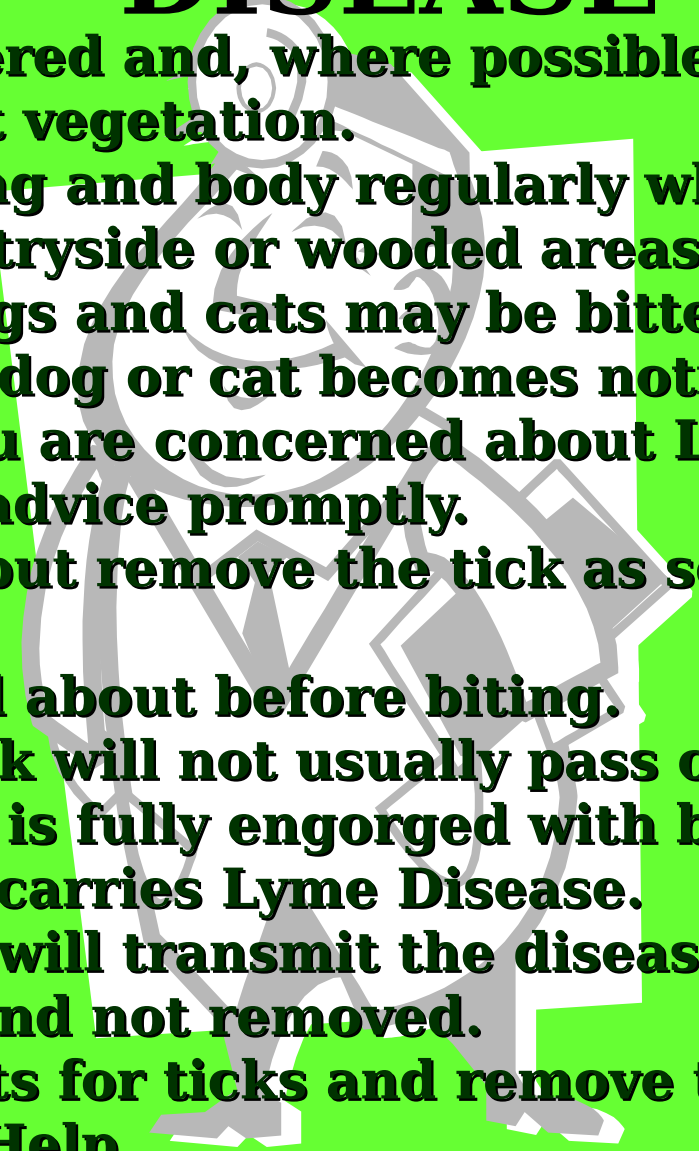
- **If left untreated, the disease may develop over months and even years, when facial muscle weakness, meningitis-like symptoms, and/or arthritis symptoms may occur.**

- **If you have any of these symptoms and you**

Life Cycle

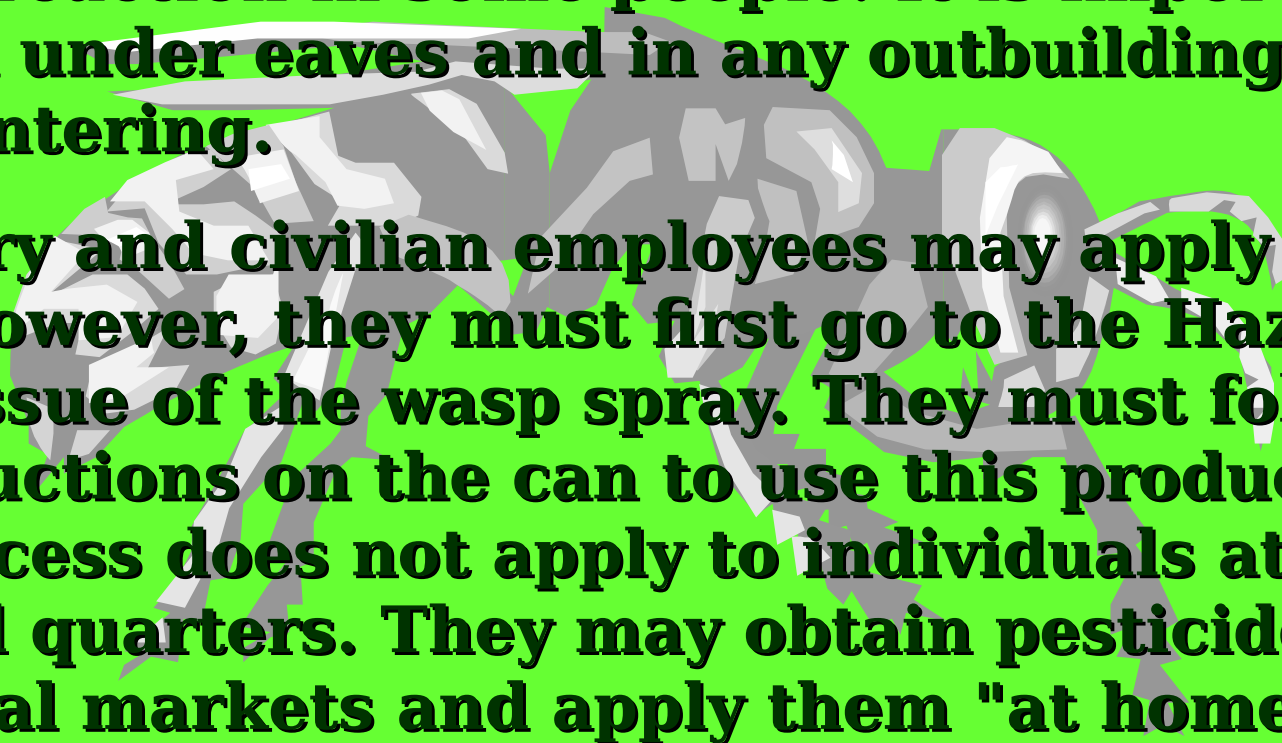

LIFE HISTORY OF THE TICK
YEAR 1 SPRING
Female lays eggs in soil
YEAR 1 SUMMER
Uninfected six-legged larva hatches
YEAR 2 SPRING
Larva feeds on small animals becoming infected
YEAR 2 SUMMER
Larva moults and develops into eight-legged nymph
YEAR 3 SPRING
Nymph feeds on animals or humans and may transmit infection
YEAR 3 SUMMER
Nymph develops into adult tick
YEAR 3/4 AUTUMN OR SPRING
Adult feed on large animals or human and may transmit infection

A REVIEW OF LYME DISEASE



- Keep skin covered and, where possible, avoid brushing against vegetation.
- Inspect clothing and body regularly when you spend time in the countryside or wooded areas.
- Remember, dogs and cats may be bitten and infected. If your dog or cat becomes noticeably lethargic and you are concerned about Lyme Disease, seek Veterinary advice promptly.
- Do not panic, but remove the tick as soon as possible.
- They will crawl about before biting.
- An infected tick will not usually pass on the infection until it is fully engorged with blood.
- Not every tick carries Lyme Disease.
- Not every bite will transmit the disease, even if the tick is infected and not removed.
- Check your pets for ticks and remove them.
- Seek Medical Help

Wasps, Hornets and Bees



- **Stings are painful and can cause a very serious allergic reaction in some people. It is important to check under eaves and in any outbuildings before entering.**
- **Military and civilian employees may apply wasp spray. However, they must first go to the HazMart before issue of the wasp spray. They must follow all instructions on the can to use this product. This process does not apply to individuals at their assigned quarters. They may obtain pesticides from local markets and apply them "at home".**

Snakes

The copperhead is found in Maryland, Georgia, and Alabama and is venomous. Copperheads are relatively common, and are most often found on brushy, rocky hillsides that descend into trees. Copperheads are relatively docile snakes and are very well camouflaged. The majority of copperhead bites are either on the victim's hand or ankle, indicating that the victim was harassing the snake or stepped on it. Anyone who is bitten by a copperhead should seek immediate medical trea ion. Although th e have not been any fat e state of Maryland fr .

Snakes Cont.

Canebrake or Timber Rattlesnake is Common. This species occupies a wide diversity of terrestrial habitats, but is found most frequently in deciduous forests and high ground in swamps. Heavy-bodied adults are usually 3 to 4, and occasionally 5, ft. long. Their basic color is gray with black crossbands that usually are chevron-shaped. Timber rattlesnakes feed on various rodents, rabbits, and occasionally birds. These rattlesnakes are generally passive if not disturbed or pestered in some way. When a rattlesnake is encountered, the

Snakes Cont.

Cottonmouth (Water Moccasin) **Abundant. Cottonmouths are found in association with every type of wetland habitat including estuaries, tidal creeks, and salt marshes; this species often wanders overland in search of food. Adults reach lengths of 3 to 4 ft. and often are heavy-bodied. The color pattern is variable, but the backs of adults are usually drab brown or olive with darker crossbands. The belly is a combination of dull yellow and brown and the underside of the tail usually is black. This species is unquestionably the most common venomous snake found in wet-land habitat types. However, the harmless brown water snake, which is very common in aquatic areas frequented by humans, of**

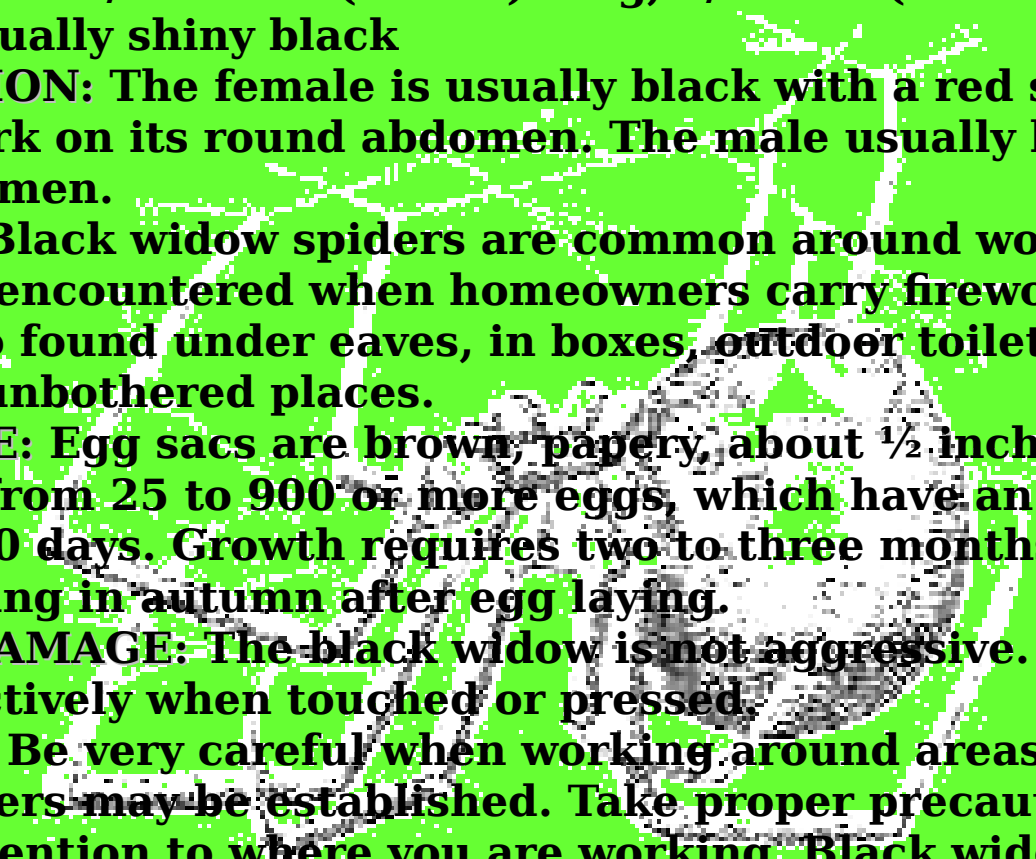
ous cottonmouth. If disturbed stand its ground and give ay. Brown water snakes, whe overhanging tree limbs ar

Snakes Cont.

Eastern Coral. Eastern coral snakes are found in Georgia in association with a wide variety of terrestrial habitats including wooded areas, fields, and margins of aquatic areas. Adults reach about 2 ft. in length. Red, yellow, and black rings encircle the body. The narrow yellow rings touch the red rings, a pattern distinguishing this species from the scarlet kingsnake and the scarlet snake. The nose is always black, followed by a wide yellow band. This snake feeds on small snakes and lizards. Coral snakes, which belong to the same family as Old World cobras and kraits, have short, fixed fangs in the front of the mouth. The potential s pecies warrants a univ snake in this region of the c without being certain o

Black Widow Spider

Spiders



SIZE: About 1 1/2 inches (38mm) long, 1/4 inch (6.4mm) in diameter
COLOR: Usually shiny black
DESCRIPTION: The female is usually black with a red spot or hourglass-shaped mark on its round abdomen. The male usually has light streaks on its abdomen.
HABITAT: Black widow spiders are common around wood piles, and are frequently encountered when homeowners carry firewood into the house. Also found under eaves, in boxes, outdoor toilets, meter boxes, and other unbothered places.
LIFE CYCLE: Egg sacs are brown, papery, about ½ inch long and oval. They hold from 25 to 900 or more eggs, which have an incubation period of 20 days. Growth requires two to three months, with older females dying in autumn after egg laying.
TYPE OF DAMAGE: The black widow is not aggressive. It will, however, bite instinctively when touched or pressed.
CONTROL: Be very careful when working around areas where black widow spiders may be established. Take proper precautions-wear gloves and pay attention to where you are working. Black widow bites are sharp and painful, and the victim should go to the doctor immediately for treatment. To control the black widow, carefully remove all materials where they might hide. They can be cleaned out of an area simply by knocking down the webs, spiders, and round tan egg sacs with a stick and crushing them underfoot.
INTERESTING FACTS: The female eats the male after mating. She hangs belly upward and rarely leaves the web.

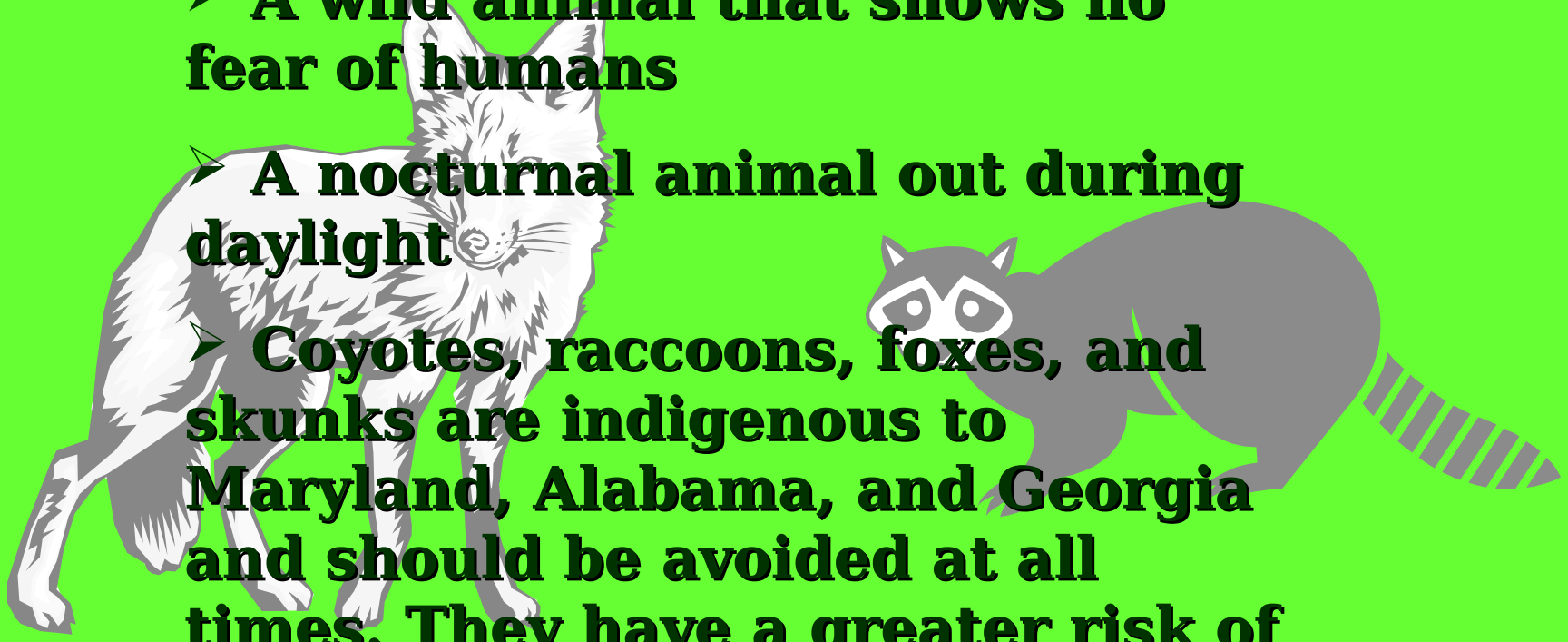
Spiders Cont.

Brown Recluse Spider

SIZE: 1/4 to 3/4 inch (6.4-19.1mm)
COLOR: Golden brown
DESCRIPTION: Brown recluse spiders belong to a group of spiders commonly known as violin spiders or fiddlebacks. This is because of a characteristic fiddle-shaped pattern they have on their head region. The spider is golden brown with the fiddle being dark brown or black. This spider is not hairy and the fiddle pattern is often shiny. They are about 1/4 to 3/4 inch long.
HABITAT: Brown recluse spiders are found primarily in the Midwest. Many cases of bites are reported from Texas, Kansas, Missouri, Oklahoma, Alabama, and Georgia. The edge of its range just reaches the tip of western Virginia, but it occurs rarely in this state. The spider commonly lives in basements and garages of houses and often hides behind boards and boxes. Bites often occur when the spiders hide in towels or old clothes left in those areas.
LIFE CYCLE: Female deposits eggs in off-white silken cases about 1/3 inch in diameter in sheltered, dark areas. Spiderlings emerge in 24-36 days and abandon the egg case. Development is slow, influenced by weather conditions and food availability. They reach maturity in 10 to 12 months and can survive long periods of time without food or water.
TYPE OF DAMAGE: The severity of the bite may vary. The symptoms may vary from no harm at all to a reaction that is very severe. Often there is a systemic reaction within 24-36 hours characterized by restlessness, fever, chills, nausea, weakness, and joint pain. Where the bite occurs there is often tissue death and skin is sloughed off. In some severe cases, a wound may develop that lasts several months.
CONTROL: In all cases, a physician should be notified. If at all possible, kill and take the spider to the physician for positive identification. Individual spiders can

Coyote – Raccoon

Rabies



- A wild animal that shows no fear of humans
- A nocturnal animal out during daylight
- Coyotes, raccoons, foxes, and skunks are indigenous to Maryland, Alabama, and Georgia and should be avoided at all times. They have a greater risk of being infected with rabies.
- Avoid any animal frothing at the mouth.

Jelly Fish

Treatment

There are three goals of first aid for uncomplicated jellyfish stings:
• Prevent injury to rescuers,
• Inactivate the nematocysts, and remove any tentacles stuck on the patient.
• To prevent injury to rescuers, barrier clothing should be worn. This protection may include anything from panty hose to wet suits to full-body sting-proof suits. Inactivating the nematocysts, or stinging cells, prevents further injection of venom into the patient.

Vinegar (3 to 10% acetic acid in water) should be applied for box jellyfish stings. However, vinegar is not recommended for Portuguese Man o' War stings. In the case of stings on or around the eyes, vinegar may be placed on a towel and dabbed around the eyes, but not in them. Salt water may also be used in case vinegar is not readily available. Fresh water should not be used if the sting occurred in salt water, as a change in pH can cause the release of additional venom. Rubbing the wound, or using alcohol, spirits, ammonia, or urine will encourage the release of venom and should be avoided.

Once deactivated, the stinging cells must be removed. This can be accomplished by picking off tentacles left on the body. First aid providers should be careful to use gloves or another readily available barrier device to prevent personal injury, and to follow standard universal precautions. After large pieces of the

Questions?